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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dennis Kornacki

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09/13/2005

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EXAMINER

WOO, RICHARD SUKYOON

ART UNIT

PAPER NUMBER

3639

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/809,563

Applicant(s)

KORNACKI, DENNIS

Examiner

Richard Woo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

- 1) Applicant's amendment filed on June 27, 2005 has been acknowledged and entered.

### ***Response to Arguments***

- 2) Applicant's arguments, filed on June 27, 2005, with respect to rejections of Claims under 35 U.S.C. 101 and 112, respectively, have been fully considered and are persuasive. The rejections of corresponding Claims have been withdrawn.
- 3) Applicant's arguments with respect to the rejection of Claims under 35 U.S.C. 102 have been fully considered but are not persuasive.

In response to Applicant's argument that O'Neill et al. does not teach or suggest determining an optimal orientation of the first shipment relative to the carrier unit available capacity, the examiner respectfully traverses this. The examiner invites the Applicant's attention to the column 12, lines 23-44. O'Neill et al. clearly discloses the invention that maximizes the capacity of the delivery container for any given shipment and the market order builder utilizes any suitable load parameter, which includes a maximum volume of the container (so as to determine how the shipment should be stacked or positioned to maximize the capacity), the maximum board-feet and/or linear-feet capacity and other suitable parameter. Furthermore, the graphical market order builder provides a graphical representation of the load in the hull of a ship (inherently, the shape of hull MUST be factored in and the orientation of the shipment relative to the

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shape of the hull MUST be considered), a truck trailer, a railcar, or any other suitable container. Accordingly, the invention of O'Neill et al. inherently discloses the method step or means for determining an optimal orientation of the shipment relative to the carrier unit available capacity.

4) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

5) Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Neill et al. (US 6,219,653).

As for Claim 1, O'Neill et al discloses a method comprising the steps of:

gathering physical property data about a carrier unit, said data comprising carrier unit dimensions and weight limit of said carrier unit (see col. 25, lines 31-45);

calculating a total available capacity in said carrier unit, wherein said total available capacity comprises a weight limit for said carrier unit and a volume of said carrier unit (see col. 25, lines 46-67);

storing said total available capacity in said carrier unit;

gathering a distance a first shipment is to be transported (see col. 31, line 64 – col. 32, line 22);

gathering physical property data about said first shipment, wherein said physical property data is selected from the group consisting of [dimensions of one package in

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said shipment, volume of one package in said shipment, weight of one package in said shipment, mass of one package in said shipment, dimensions of said shipment, weight of said shipment, volume of said shipment, mass of said shipment, number of packages in said shipment, density of said shipment, class of said shipment] (see Supra column 25);

calculating an amount of said total available capacity to be occupied by said first shipment in said carrier unit, wherein said amount of total available capacity to be occupied by said first shipment comprises a total weight of said first shipment and a total volume to be occupied by said first shipment (see Id.);

storing said amount of said total available capacity occupied by said first shipment in said carrier unit;

calculating remaining available capacity in said carrier unit after said first shipment is loaded in said carrier unit (see Supra column 25);

storing said remaining available capacity in said carrier unit (see Id.); and

calculating a rate to be charged for said first shipment based upon said amount of said total available capacity occupied by said first shipment in said carrier unit and said distance said first shipment is to be transported (see Figs. 15A-C and the descriptions thereof);

storing said rate (see Id.);

calculating a total charge for transporting said first shipment (see col. Supra column 31 and col. 32, line 59 – col. 33, line 7);

displaying said total charge (see Supra Figs. 15A-C); and

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determining an optimal orientation of the first shipment relative to the carrier unit available capacity (see Supra Response to Arguments).

As for Claim 2, O'Neill et al. further discloses the method including:

storing said optimal orientation of said first shipment (see Figs. for the database system).

As for Claim 3, O'Neill et al. further discloses the method, including:

gathering a distance a second shipment is to be transported (see Supra gathering the distance in Claim 1);

gathering physical property data about said second shipment, wherein said physical property data is selected from the group consisting of [dimensions of one package in said shipment, volume of one package in said shipment, weight of one package in said shipment, mass of one package in said shipment, dimensions of said shipment, weight of said shipment, volume of said shipment, mass of said shipment, number of packages in said shipment, density of said shipment, class of said shipment] (see Supra column 25);

calculating an amount of said total available capacity to be occupied by said second shipment in said carrier unit, wherein said amount of total available capacity to be occupied by said second shipment comprises a total weight of said second shipment and a total volume to be occupied by said second shipment (see Id.);

storing said amount of said total available capacity occupied by said second shipment in said carrier unit (see Supra Claim 1);

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calculating remaining available capacity in said carrier unit after said second shipment is loaded in said carrier unit (see *Id.*);

storing said remaining capacity in said carrier unit;

calculating a rate to be charged for said second shipment based upon said amount of said total available capacity occupied by said second shipment in said carrier unit and said distance said second shipment is to be transported (see *Supra* columns 25, 26, 31, 32);

storing said rate;

calculating a total charge for transporting said second shipment (see *Supra* columns 31, 32); and

displaying said total charge (see *Supra* Figs.).

As for Claim 4, O'Neill et al. further discloses the method including:

determining the optimal orientation of said second shipment relative to said carrier unit and relative to said first shipment (see *Supra* columns 12, 31, and 32); and

storing said optimal orientation of said second shipment.

As for Claim 5, O'Neill et al. further discloses the method including:

determining the optimal orientation of said first shipment relative to said carrier unit and said second shipment using said stored optimal orientation of said first shipment (see *Id.*).

As for Claim 6, O'Neill et al. further discloses the method, wherein said step of determining a rate to be charged for said shipment comprises:

calculating a fair price for transporting a shipment having substantially similar

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physical properties to said first shipment (col. 27, line 55 – col. 28, line 26).

As for Claim 7, O'Neill et al. further discloses the method, wherein said step of calculating a total charge for transporting said first shipment comprises:

- calculating a total density capacity of said carrier unit by dividing said weight limit of said carrier unit by said volume of said carrier unit (see Fig. 13F and Supra col. 25);

- calculating a volume of said first shipment (see Id.);

- calculating a density of said first shipment (divide the weight by the volume);

- computing a first cube charge calculation value by dividing said rate by said total density capacity (see Supra column 25);

- computing a second cube charge calculation value by dividing the product of the volume of said carrier unit multiplied by the total density capacity of said carrier unit by a density of said first shipment (repeating the previous step);

- calculating a third cube charge computation value by dividing said first cube charge computation value by said second cube charge computation value; and

- multiplying said third cube charge computation value by a number of miles said first shipment is to be transported, the density of said first shipment and the volume of said first shipment (see Figs. 13A-F, 15A-C).

As for Claim 8, O'Neill et al. further discloses the method, wherein said step of calculating a total charge for transporting said first shipment comprises;

- determining a total length of said first shipment (see Supra column 25);

- determining a total length of said carrier unit (see Id.);



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dividing said rate by said length of said carrier unit; and  
multiplying the product of said rate divided by said total length of said carrier unit by said distance said first shipment is to be transported and a length of said first shipment (see Fig. 13F and Supra columns 25-26).

As for Claim 9, O'Neill et al. further discloses the method, wherein the step of calculating a total charge includes:

calculating a volume of said shipment (see Supra columns 25, 26);  
calculating a density of said first shipment (see Id.);  
calculating a density class of said shipment (see Id.);  
calculating a total density capacity of said carrier unit by dividing the weight limit of said carrier unit by the volume of said carrier unit (by utilizing the Load Balance Indicators in Fig. 13F);  
computing a first class charge calculation value by dividing the product of the rate divided by said total density capacity of said carrier unit by said volume of said carrier unit (see Figs. 13A-F);  
computing a second class charge calculation value by dividing the total density capacity of said carrier unit by said density of said first shipment (see Id.); and  
multiplying said first class charge calculation value, said second class charge computation value, said distance said first shipment is to be transported, said class density value and said volume of said shipment (see Figs. 13A-F, 15A-C).

As for Claim 10, O'Neill et al. further discloses the method, wherein said step of calculating a total charge for transporting said first shipment comprises:

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determining a total weight of said first shipment (see Supra columns 25, 26);  
determining a total volume of said first shipment (see Id.);  
calculating a density of said first shipment (see Fig. 13F);  
dividing said rate by the product of said shipment density multiplied by the  
shipment volume to calculate a weight charge value; and  
multiplying said weight charge value by said total weight of said first shipment  
and said distance said first shipment will be transported (see Figs. 13A-F, 15A-C and  
the Supra columns 25-6, 31, 32).

As for Claim 11, O'Neill et al. discloses a data processing system comprising:  
a computing device and a display (see Supra Figs.);  
means for entering information (see the input device in 2) about a carrier unit  
said information comprising  
one or more members of the group consisting of dimensions of said carrier unit, weight  
capacity of said carrier unit, density capacity of said carrier unit; and length of said  
carrier unit;  
means for calculating (the processor in the computer system in Fig. 2) a total  
volume and a weight capacity of said carrier unit based on said entered information  
about said carrier unit;  
means for storing (the computer system in Fig. 2 MUST have the storage for the  
data) said total volume and said weight capacity of said carrier unit;

means for displaying (the monitor) said total volume and said weight capacity of said carrier unit;

means for entering a distance a first shipment is to be transported (see Supra input device);

means for entering information about said first shipment, said information comprising one or more members of the following: dimensions of one package in said shipment, volume of one package in said shipment, weight of one package in said shipment, mass of one package in said shipment, dimensions of said shipment', volume of said shipment, weight of said shipment, mass of said shipment, density of said shipment, number of packages in said shipment', and class of said shipment (see Id.);

means for determining a value for said first shipment of a volume of said first shipment, a density of said first shipment, a total weight of said first shipment, and a total length of said first shipment based on said information entered about said first shipment (see Figs. 2, 13A-F, 15A-C);

means for storing said values of said volume of said first shipment, said density of said first shipment, said total weight of said first shipment, and said total length of said first shipment based on said information entered about said first shipment (see Supra database);

means for displaying said calculated values for said first shipment (see Supra monitor);

means for determining the optimal orientation of one or more packages in said first shipment relative to said carrier unit (see Supra Response to Arguments);

means for storing said optimal orientation of said one or more packages in said first shipment (see Supra database);

means for displaying said optimal orientation of said one or more packages in said first shipment (see Supra monitor);

means for determining an amount of carrier unit total area occupied by said first shipment and a portion of weight capacity occupied by said first shipment (see Supra processor);

means for storing said amount of carrier unit area occupied by said first shipment and said portion of weight capacity occupied by said first shipment (see Fig.2 and Supra database); and

means for displaying said amount of carrier unit area and said portion of weight capacity occupied by said first shipment (see Fig. 2 and Supra monitor).

As for Claim 12, O'Neill et al. further discloses the data processing system including:

means for entering a distance said second shipment is to be transported (see Supra input device in Fig. 2);

means for entering information about a second shipment, said information comprising at least one member of the following: dimensions of one package in said shipment, volume of one package in said shipment, weight of one package in said shipment, mass of one package in said shipment, dimensions of said shipment; volume of said shipment, weight of said shipment, mass of said shipment, density of said shipment, number of packages in said shipment and class of said shipment (see Id.);

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means for calculating values for a volume of said second shipment, a density of said second shipment, a total weight of said second shipment, and a total length of said second shipment (see Supra processor);

means for storing said values of said volume of said second shipment, said density of said second shipment, said total weight of said second shipment, and said total length of said second shipment (see Supra database);

means for displaying said values for said second shipment (see Fig. 2 for Supra monitor);

means for determining the optimal orientation of one or more packages in said second shipment relative to said carrier unit and relative to said first shipment (see Supra processor);

means for storing said optimal orientation of said one or more packages in said second shipment (see Supra database);

means for displaying said optimal orientation of said one or more packages in said second shipment (see Supra Monitor);

means for determining an amount of carrier unit total area occupied by said second shipment and a portion of weight capacity occupied by said second shipment (see Supra processor);

and

means for storing said amount of carrier unit area occupied by said second shipment and said portion of weight capacity occupied by said second shipment (see Supra database); and

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means for displaying said amount of carrier unit area and said portion of weight capacity occupied by said second shipment (see Supra monitor).

As for Claim 13, O'Neill et al. further discloses the data processing system including:

means for calculating charges for transporting said first shipment (see Supra processor).

As for Claim 14, O'Neill et al. further discloses the data processing system, wherein said means for calculating said charges for transporting said first shipment comprises:

means for entering a rate to be charged based on said distance said first shipment is to be transported and at least one physical property of said shipment (see Supra input device in Fig. 2);

application for recalling at least one member of the following group: total volume occupied by said first shipment, total weight of said first shipment, total length of said first shipment or class of said first shipment (see Supra Figs. 13A-F, 15A-C for the applications); and

application for recalling said total available capacity of said carrier unit (see Id.);

application for recalling said distance that said first shipment is to be transported (see Id.); and

application for calculating charges for transporting said shipment relative to said total capacity of said carrier unit based on said distance and at least one member of the following: total volume occupied by said shipment, total weight of said shipment, total length of said shipment and class of said shipment (see Supra Figs. for the applications).

As for Claim 15, O'Neill et al. discloses a computer program product comprising:

a computer usable medium having computer readable program code means embodied in said medium for determining available capacity in a carrier unit (see Fig. 13F and col. 25, lines 31-67);

the computer usable medium having computer readable program code means embodied in said medium for determining an amount of space to be occupied by a first shipment in said carrier unit (see Id.);

the computer usable medium having computer readable program code means embodied in said medium for determining remaining capacity in said carrier unit after said first shipment is loaded onto said carrier unit (see Supra column);

the computer usable medium having computer readable program code means embodied in said medium for determining an optimal orientation for said first shipment in said carrier unit (see Figs. 15A-C and 17-18; col. 12, lines 23-44; and col. 31, line 64 – col. 32, line 22);

the computer usable medium having computer readable program code means embodied in said medium for storing said available capacity of said carrier unit, said amount of space to be occupied by said first shipment in said carrier unit, said remaining space in said carrier unit after said first shipment is Loaded into said carrier unit, and said optimal orientation of said first shipment in said carrier unit; and

the computer usable medium having computer readable program code means embodied in said medium for determining whether additional packages can be added to said carrier unit (see Fig.13F for the Load Balance Indicators).

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As for Claim 16, O'Neill et al. further discloses the computer program product including:

the computer usable medium having computer readable program code means embodied in said medium for determining an amount of space to be occupied by a second shipment in said carrier unit (see col. 25, lines 31-67);

the computer usable medium having computer readable program code means embodied in said medium for determining remaining capacity in said carrier unit after said second shipment is loaded onto said carrier unit (see Id.);

the computer usable medium having computer readable program code means embodied in said medium for determining an optimal orientation for said second shipment in said carrier unit relative to said first shipment (see Supra columns 31, 32);

the computer usable medium having computer readable program code means embodied in said medium for storing said amount of space to be occupied by said second shipment in said carrier unit, said remaining space in said carrier unit after said second shipment is loaded into said carrier unit, and said optimal orientation of second first shipment in said carrier unit; and

the computer usable medium having computer readable program code means embodied in said medium for determining whether additional packages can be added to said carrier unit (see Supra Fig. 13F for the Load Balance Indicators).

As for Claim 17, O'Neill et al. further discloses the computer program product including:

a computer usable medium having computer readable program code means embodied in said medium for entering a rate to be charged based on said distance and



at least one physical property of said first shipment (see Supra Figs. 13 and 15s for the GUI to enter any input);

the computer usable medium having computer readable program code means embodied in said medium for determining at least one member of the following group a total volume occupied by said first shipment, a total weight occupied by said first shipment, a total length of said first shipment or a class of said first shipment (see Supra columns); and

the computer usable medium having computer readable program code means embodied in said medium for calculating charges for transporting said shipment relative to said total capacity of said carrier unit based on said distance and at least one member of the following: total volume occupied by said shipment, total weight of said shipment, total length of said shipment and class of said shipment (see Supra Figs. 15A-C and col. 31, line 64 – col. 32, line 22).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

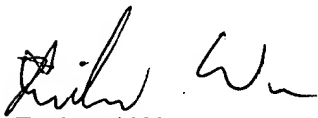
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

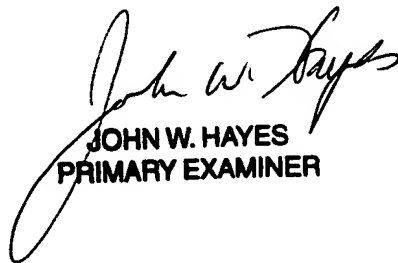
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Woo  
Art Unit 3639  
August 30, 2005



**JOHN W. HAYES**  
**PRIMARY EXAMINER**